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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,449	11/09/2000	Tetsuya Yamamoto	SZI 2 0014	3753

7590 12/31/2003
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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,449

Applicant(s)

YAMAMOTO ET AL.

Examiner

Gail Verbitsky

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In this case, it appears, that the term "time-sharing" has not been described in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 20-31, 34, and 36-37 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Turner (U.S. 4090064) in view of Buisson.

Turner discloses in Fig. 3 a thermometer comprising a computation means 16 computing temperature measured by temperature measuring circuits (computation means) 12 and 14 in a predetermined computation digits (decimal) numbers, a digit shift means (counter) for changing a display device 100. Turner also discloses displaying an upper/ first temperature value portion (most significant) displayed with a first set of a predetermined digit/ digits, and a lower/ second temperature value portion (less significant) displayed with a second set of a predetermined digit/ digits computed by said computation means. Inherently the second temperature value portion can include any digit/ digits different from the first temperature value portion. Turner further discloses an on-off switch to start measurements in a predetermined pattern. Temperature measurements last for a predetermined time. The display is a LED (lighting display) having two display sections for higher and lower digits to fit a first and a second temperature value portions respectively. The two temperature value portions are being measured in Fahrenheit (selected from the same temperature value) and can be 100.0F/ four digits display (col. 2, line 66) wherein, "100" are the higher digits, and "0" is the lower digit. Both temperature value portions are selected from the same temperature value measured on an object. Inherently, when display displays the value, its segments are lighted. It is inherent that the value of the measured temperature can be larger and does not fit in four digit (predetermined display number) and it will require

another digit in the display, however, depending on the required accuracy, the computation means, will round the result to fit in 4 digits of said display.

For claim 25: The first temperature value portion displayed on the display has a different value than the second temperature value portion (decimal vs. integers).

For claims 26-27: Inherently, that the control device controls the display device so as to display the first or the second temperature value portions (or both) in a single measuring operation, depending on the value of the measured temperature and the desired accuracy (i.e., if the measured temperature is 99 degrees exactly, the first temperature value portion equal to 99 will be displayed, if the measured temperature is only .9, the second temperature value portion .9 will be displayed. If the measured temperature is 99.9, both portions will be displayed in a single temperature measuring operation).

For claim 31: The first temperature value portion occupies higher three digits, and the second temperature value portion occupies the lowest fourth digit.

For claim 34: It is inherent that a decimal point (first decimal point) is lighted (shown/displayed when the first temperature value portion and the second temperature value portion are lighted/ displayed, and a decimal point of the second temperature value portion (second decimal point) is not lighted (not shown/ not displayed) for the purpose of measuring of the temperature of the object.

Turner does not disclose that the first temperature value portion (first display) and the second temperature value portion (second display) can be switched and selectively/ alternately displayed in a time-sharing manner, as stated in claim 20.

Buisson discloses a device in the field of applicants endeavor comprising a switch (digit shift/ operation switch) and a control device responding to the switch, the switch for selectively/ alternately (in time sharing manner) switching in between two screens of a display device. Inherently the control device switches the display device on

the basis of the operation pattern of the switch. Inherently, the control device is responsive to the switch at the time of initiating measurements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner, so as to make the digit shift work as a switch, as taught by Buisson, in order to selectively switch the display so as only desired range of the information to be displayed.

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Buisson, as applied to claims 20-31, 34, and 36-37 above, and further in view of The temperature Book by Omega, volume 25, page K-75. 1995 [hereinafter Omega].

Turner and Buisson disclose the device as stated above in paragraph 6.

They do not disclose that the second temperature value portion consists of lower three digits of the display, as stated in claim 32.

Omega discloses a thermometer having a display with three digit numbers ("450") for integers (second temperature value portion) (see attachment to the Office Action).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display disclosed by Turner and Buisson, so as to have three digits number for integers (second temperature value portion), as taught by Omega, in order to achieve a higher accuracy by calculating and displaying maximal possible number/ value after decimal.

8. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Buisson, as applied to claims 20-31, 34, and 36-37 above, and further in view of Kawamura.

Turner and Buisson disclose the device as stated above in paragraph 6.

They do not disclose that the second temperature value portion in a blinking condition/ mode.

Kawamura teaches that a display (part of the display/ segment) that requires attention of the operator can blink. Thus, inherently, if a second temperature value portion requires attention, it will blink.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner and Buisson, so as to make the segments displaying the second temperature value portion blink, if (when) they require more attention of the operator, as taught by Kawamura, in order to alert the operator.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Buisson, as applied to claims 20-31, 34, and 36-37 above, in view of Ruhl (U.S. 4009615).

Turner and Buisson disclose the device as stated above in paragraph 6.

They do not disclose that an operation switch for initializing temperature measurement switches a display of the first temperature value portion and the second temperature value portions on the basis of an operation pattern, as stated in claim 36, and that the control device detects the pattern at a time of initiation of the temperature measurements.

Ruhl discloses in Fig. 1 a device in the field of applicant's endeavor comprising a display device 26 for displaying a temperature of an object in two different display modes, Fahrenheit and Celsius.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Turner and Buisson, so as to enable the operator to measure the temperature in two different modes, Fahrenheit and Celsius, as taught by Ruhl, so as to make the device usable in different countries.

Response to Arguments

10. Applicant's arguments with respect to claims 20-37 have been considered but are moot in view of the new ground(s) of rejection necessitated by the present amendment.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices.

Any inquiry concerning this communication should be directed to examiner Verbitsky who can be reached at (703) 306-5473 Monday through Friday, 7:30 to 4:00 ET.

Any inquiry of general nature should be directed to the Group receptionist whose telephone number is (703) 308-0956.

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GKV

12 December 2003

Gail Verbitsky

Patent Examiner, TC 2800

A handwritten signature in black ink, appearing to read "G. Verbitsky", written in a cursive style.